

ABSTRACT OF THE DISCLOSURE

A semiconductor device includes a metal wiring provided on a semiconductor substrate. The device further includes an anti-metal diffusion film formed on the metal wiring, a buffer layer which is formed on the anti-metal diffusion film and includes at least a silicon-methyl radical bond and a silicon-oxygen bond, and a low-dielectric constant film layer which is formed on the buffer layer and includes at least the silicon-methyl radical bond and the silicon-oxygen bond, wherein the silicon-methyl radical bonding density of the buffer layer is less than the silicon-methyl radical bonding density of the low-dielectric constant film layer.